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Date of Deposit: October 21, 2003

Our Case No.: 3614/94

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Chow et al.

Serial No.: To be Assigned

Filing Date: Herewith

For: MULTI-PHASIC

MICROPHOTODETECTOR RETINAL IMPLANT WITH VARIABLE VOLTAGE AND **CURRENT CAPABILITY AND** APPARATUS FOR INSERTION Examiner: Unknown

Group Art Unit No.: 3762

### INFORMATION DISCLOSURE STATEMENT

**Commissioner for Patents** Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed below and on the attached Form PTO-1449 be considered by the Examiner and made of record.

The references now cited are the following:

## **U.S. PATENTS**

Patent No.	<u>Date</u>	<u>Inventor</u>
2,760,483 3,594,823 3,628,193 3,766,311 3,848,608 3,914,800	08/28/56 07/27/71 12/21/71 10/16/73 11/19/74 10/28/75	Tassicker Collins Collins Boll Leonard Collins
4,001,867	01/04/77	Kravitz et al.

Patent No.	<u>Date</u>	Inventor
4,211,474	07/08/80	Le Goff
4,251,887	02/24/81	Anis
4,272,910	06/16/81	Danz
4,551,149	11/05/85	Sciarra
4,600,004	07/15/86	Lopez et al.
4,601,545	07/22/86	Kern
4,628,933	12/16/86	Michelson
4,679,572	07/14/87	Baker, Jr.
4,750,498	06/14/88	Graham
4,810,050	03/07/89	Hooper
4,832,202	06/1989	Newman et al.
4,681,102	07/21/87	Bartell
4,873,448	10/10/89	Shirai
4,978,842	12/18/90	Hinton et al.
5,016,633	05/21/91	Chow
5,024,223	06/18/91	Chow
5,109,844	05/1992	de Juan Jr. et al.
5,130,528	07/14/92	Phillips, Jr.
5,130,776	07/14/92	Popovic et al.
5,159,927	11/03/92	Schmid
5,223,728	06/29/93	Gempe
5,256,882	10/1993	Miyasaka
5,273,530	12/28/93	del Cerro et al.
5,338,991	08/16/94	Lu
5,351,309	09/27/94	Lee et al.
5,397,350	03/14/95	Chow et al.
5,411,540	05/02/95	Edell et al.
5,476,494	12/19/95	Edell et al.
5,491,349	02/13/96	Komoto et al.
5,556,423	09/17/96	Chow et al.
5,648,655	07/15/97	Rostoker
5,717,201	02/10/98	Lin et al.
5,817,075	10/06/98	Giungo
5,865,839	02/02/99	Doorish
5,868,728	02/09/99	Giungo et al.
5,895,414	04/1999	Chow et al.
5,895,415	04/20/99	Chow et al.
5,935,155	08/10/99	Humayun et al.
5,941,250	08/24/99	Aramant et al.
5,944,747	08/31/99	Greenberg et al.
5,962,027	10/05/99	Hughes
6,032,062	02/29/00	Nisch
6,035,236	03/07/00	Jarding et al.
6,159,218	12/12/00	Aramant et al.

Patent No. Date Inventor
6,230,057 05/2001 Chow et al.

### **FOREIGN DOCUMENTS**

Document No.	<u>Date</u>	Country
WO 99/15119	04/01/99	PCT
DE-OS 195 29 371	02/13/97	Germany
GB 2 229 543 A	09/26/90	<b>Great Britain</b>
0 501 904 A2	02/26/92	EPO
0 233 789	02/20/87	EPO
0 084 621 A2	11/23/82	EPO

#### **OTHER ART**

Article published in Science News, February 2, 1974, Vol. 105, No. 5, p. 105.

Article published in Science, July 1981.

Abrams, Dr. Susan B., "Implanted photodiodes could restore lost vision", Biophotonics Research, 2 pages, 1997

Ando, Haruhisa, et al. "Design Consideration and Performance of a New MOS Imaging Device", 6 pages, IEEE (1985)

Armington, J.C., Brigell, M., "Effects of Stimulus Location and Pattern Upon the Visually Evoked Cortical Potential and the Electroretinogram," *Int J. Neurosci*, 1981; 14:169-178.

Baylor, D.A., Fourtes, M.G.F., "Electrical Responses of Single Cones in the Retina of the Turtle," *J Physiol*, 1970; 207:77-92.

Bergmann-Schaefer, "Lehrbuch der Experimentalphysik" (Textbook of Experimental Physics), vol. II, "Electricity and Magnetism" by Prof. Dr. -Ing. H. Gobrecht, 3 pp., (1971) plus translation.

Bobsch, M.D., Joseph M. and Grosser, Ph.D., Morton "Newer Repair at the AXOM Level: A Merger of Microsurgery and Microelectronics," VCH Publishers, Inc. (1967).

Boettner, E.A., Wolter, J.R., "Transmission of the Ocular Media," *Invest Ophthalmol*, 1962; 1:776-783.

Brady, G.S., Clauser, H.R., *Materials Handbook, Thirteenth Edition*, New York, McGraw-Hill, 1991; 739-740.

Brindley, G.S., "The Site of Electrical Excitation of the Human Eye," *J. Physiol*, 1955; 127-189-200.

Brindley, G.S., "Beats Produced by Simultaneous Stimulation of the Human Eye with Intermittent Light and Intermittent or Alternating Electric Current," *J. Physiol*, 1962; 164:156-167.

Brown, et al., "Monolithically Integrated 1 x 12 Array of Planar InGaAs/InP Photodiodes," *Journal of Lightwave Technology*, Vol. LT-4, No. 3, March 1986, pgs. 283-286.

Chapin, D.M., et al., "A New Silicon *p-n* Junction Photocell for Converting Solar Radiation into Electrical Power," Letters to the Editor, Journal of Applied Physics, Vol. 25, (Jan.-Dec., 1954).

Chow, A.Y., "Electrical Stimulation of the Rabbit Retina with Subretinal Electrodes and High Density Microphotodiode Array Implants," ARVO Abstracts, *Invest Ophthalmol Vis Sci.* 199334 (Suppl):835.

Curcio, C.A., Sloan, K.R., Kaliha, R.E., Hendrickson, A.E., "Human Photoreceptor Topography," *J of Comparative Neurology,* 1990; 292:497-523.

Dawson, W.W., Radtke, N.D., "The Electrical Stimulation of the Retina by Indwelling electrodes," *Invest Ophthalmol Vis Sci.*, 1997; 16:249-252.

Dowling, J.E., Ripps, H., Visual Adaptation in the Retina of the Skate," *J Gen Physiol*, 1970; 56:491-520.

Eagle, R.C., Lucier, A.C., Bernardino, V.B., et al., "Retinal Pigment Epithelial Abnormalities in Fundus Flavimaculatus," *Ophthalmol*, 1980; 87:1189-1200.

Encyclopedia of Electronics, 2d Ed., Stan Gibilisco and Neil Sclater, Co-Editors-in-Chief, pp. 640-645 (1990).

Fenwick, P.B.C., Stone, S.A., Bushman, J., Enderby, D., "Changes in the Pattern Reversal Visual Evoked Potential as a Function of Inspired Nitrous Oxide Concentration," *Electroencephalogr Clin Neurophysiol*, 1984; 57178-183.

John B. Flynn, et al. "Total Active Area Silicon Photodiode Array", 3 pages (1964).

Graeme, J., "Position-Sensing Photodiode Amplifiers," Ch. 10, 12 pages

Granit, R., Helme, T., "Changes in Retinal Excitability Due to Polarization and Some Observatios on the Relation Between the Processes in Retina and Nerve," *J. Neurophysiol*, 1939; 2:556-565.

Hagins, W.A., Penn, R.D., Yoshikami, S., "Dark Current and Photocurrent in Retinal Rods," *Biophys J.*, 1970; 10:380-412.

Hergert, Karl, "Detectors: Expanded Photodetector Choices Pose Challenges for Designers", The Photonics Design and Applications Handbook (1996).

Humayun, M.S., Propst, R.H., Hickinbotham, D., deJuan E., Jr., Dagnelie G., "Visual Sensations Produced by Electrical Stimulation of the Retinal Surface in Patients with Ed-Stage Retinities Pigmentosa (RP)," ARVO Abstracts, *Invest Ophthalmol Vis. Sci.*, 1993; 34 (Suppl):835.

Humayun, M., Propst R., De Juan, E., et al., "Bipolar Surface Electrical Stimulation of the Vertebrate Retina," *Arch Ophthalmol*, 1994; 112:110-116.

Kataoka, "An Attempt Towards an Artificial Retina: 3-D IC Technology for an Intelligent Image Sensor," *Transducers '85: International Conference on Solid-State Sensors and Actuators 1985*, pp. 440-442.

Knighton, R.W., "An Electrically Evoked Slow Potential of the Frog's Retina. I. Properties of Response," *J. Neurophysiol*, 1975; 38-185-197.

Lin, Heng-Chih, et al., "The Vertical Integration of Crystalline NMOS and Amorphous Orientational Edge Detector" IEEE Briefs, 3 pages, (1992).

Melen, et al., "A Transparent Electrode CCD Image Sensor for a Reading Aid for the Blind," *IEEE Journal of Solid-State Circuits*, Vol. SC-9, No.2, April 1974, pp. 41-48.

Narayanan, M.V., Rizzo, J.F., Edell, D., et al., "Development of a Silicon Retinal Implant: Cortical Evoked Potentials Following Focal Stimulation of the Rabbit Retina with Light and Electricity," ARVO Abstracts, *Invest Opthalmol Vis Sci.*, 1994; 35(Suppl): 1380.

Pagon, R.A., "Retinitis Pigmentosa," Surv Ophthalmol., 1988; 33:137-177.

Paton, D., Goldberg, M.F., *Management of Ocular Injuries*, Philadelphia, W.B. Saunders Co., 1976; 134-135.

The Penguin Dictionary of Electronics, Editor: Valerie Illingworth, Carol Young Market House Books Ltd., pp. 410-413 (1988).

Potts, A.M., Inoue J., Buffum D., "The Electrically Evoked Response of the Visual System (EER)," *Invest Ophthalmol Vis Sci.*, 1968; 7:269-278.

Robblee, Lois S., Electrochemical Guidelines for Selection of Protocols and Electrode Materials for Neural Stimulation, ch. 2, Renner Learning Resource Center (undated).

Rovamo, J., Virsu, A., "An Estimation and Application of the Human Cortical Magnification Factor," *Exp Brain Res.*, 1979; 37:495-510.

Rubin, M.L., *Optics for Clinicians*, Gainsville, TRIAD Scientific Publishers, 1974; 119-123.

Shannon, R.V., "A Model of Safe Levels for Electrical Stimulation," *IEEE Tarns Biomed Eng.*, 1992; 39:424-426.

Smith, J., "Creating a Bionic Eye", ABC News, 11/5/98, 3 pp.

Stone, J.L., Barlow, W.E., Humayun, M.S., deJuan, E., Jr., Milam, A.H., "Morphometric Analysis of Macular Photoreceptor and Ganglion Cells in Retinas with Retinitis Pigmentosa," *Arch Ophthalmol*, 1992; 110:1634-1639.

Sze, S.M., "Physics of Semiconductor Devices", 2<sup>nd</sup> Ed., A Wiley-Interscience Publication, John Wiley & Sons, (undated).

Tasman, E., ed. *Duane's Foundations of Clinical Ophthamology, Volume 3*, Philadelphia, Lippincott, 1992; chapter 13:20-25, chapter 60:1-112.

Terr, L.I., Linthicum, F.H., House, W.F., "Histopathologic Study of the Cochlear Nuclei After 10 Years of Electrical Stimulation of the Human Cochlea," *Am J Otol.*, 1988; 9:1-7.

Tomita, T., "Electrical Activity of Vertebrate Photoreceptor," Q Rev. Biophys., 1970; 3:179-222.

Zrenner, Dr. Eberhart, The Development of Subretinal Microphotodiodes for Replacement of Degenerated Photoreceptors, *Ophthalmic Res.* pp. 269-280 (1997).

In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be

construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed prior to the receipt of the first Official Action reflecting an examination on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to this material, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed.

This application is a continuation application of U.S. Serial No. 10/108,573, filed March 27, 2002, which is a divisional application of U.S. Serial No. 09/539,399, filed March 31, 2000 which are relied upon for an earlier filing dated under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) only copies of documents not previously cited and submitted to the Patent and Trademark Office in the prior applications are enclosed for the convenience of the Examiner.

Applicant(s) respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

KentÆ. Genin

Registration No. 37,834 Attorney for Applicant(s)

BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610 (312) 321-4200

FORM PTO-1449	SERIAL NO.	CASE NO.
	To be Assigned	3614/94
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE	GROUP ART UNIT
APPLICANT'S INFORMATION DISCLOSURE	Herewith	FROM PRIOR
STATEMENT		APPLICATION
OTAT EMERY		3762
(use several sheets if necessary)	APPLICANT(S): Vincent Chow	et al.

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A1	2,760,483	08/28/56	Tassicker		
	A2	3,594,823	07/27/71	Collins		
	A3	3,628,193	12/21/71	Collins		
	A4	3,766,311	10/16/73	Boll		
	A5	3,848,608	11/19/74	Leonard		
	A6	3,914,800	10/28/75	Collins		
	A7	4,001,867	01/04/77	Kravitz et al.		
	A8	4,211,474	07/08/80	Le Goff		
	A9	4,251,887	02/24/81	Anis		
	A10	4,272,910	06/16/81	Danz		
<del>-</del>	A11	4,551,149	11/05/85	Sciarra		
···	A12	4,600,004	07/15/86	Lopez et al.		
	A13	4,601,545	07/22/86	Kern		
	A14	4,628,933	12/16/86	Michelson		
	A15	4,679,572	07/14/87	Baker, Jr.		
	A16	4,681,102	07/21/1987	Bartell		
	A17	4,750,498	06/14/88	Graham		
	A18	4,810,050	03/07/89	Hooper		
	A19	4,832,202	06/1989	Newman et al.		
****	A20	4,873,448	10/10/89	Shirai		
	A21	4,978,842	12/18/90	Hinton et al.		
	A22	5,016,633	05/21/91	Chow		
	A23	5,024,223	06/18/91	Chow		
	A24	5,109,844	05/1992	de Juan Jr. et al.		
	A25	5,130,528	07/14/92	Phillips, Jr.		
	A26	5,130,776	07/14/92	Popovic et al.		
	A27	5,159,927	11/03/92	Schmid		
	A28	5,223,728	06/29/93	Gempe		
	A29	5,256,882	10/1993	Miyasaka		
	A30	5,273,530	12/28/1993	del Cerro et al.		
	A31	5,338,991	08/16/94	Lu		
	A32	5,351,309	09/27/94	Lee et al.		
	A33	5,397,350	03/14/95	Chow et al.		
	A34	5,411,540	05/02/95	Edell et al.		
1812	A35	5,476,494	12/19/95	Edell et al.		
	A36	5,491,349	02/13/96	Komoto et al.		
	A37	5,556,423	09/17/96	Chow et al.		

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I ONIVITIO 1940	To be Assigned	3614/94
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE  Herewith	GROUP ART UNIT 3762
(use several sheets if necessary)	APPLICANT(S): Vincent Chow	et al.

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A38	5,648,655	07/15/97	Rostoker		
	A39	5,717,201	02/10/98	Lin et al.		
	A40	5,817,075	10/06/1998	Giungo		
	A41	5,865,839	02/02/99	Doorish		
	A42	5,868,728	02/09/1999	Giungo et al.		
	A43	5,895,414	04/1999	Chow et al.		
	A44	5,895,415	04/20/99	Chow et al.		
	A45	5,935,155	08/10/99	Humayun et al.		
	A46	5,941,250	08/24/1999	Aramant et al.		
	A47	5,944,747	08/31/99	Greenberg et al.		
***	A48	5,962,027	10/05/1999	Hughes		
	A49	6,032,062	02/29/00	Nisch		
	A50	6,035,236	03/07/00	Jarding et al.		
	A51	6,159,218	12/12/2000	Aramant et al.		
	A52	6,230,057	05/2001	Chow et al.		

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS/ SUBCLASS	TRANS	ATION NO
	A53	WO 99/15119	04/01/99	PCT			
	A54	DE-OS 195 29 371	02/13/97	Germany			
	A55	GB 2 229 543 A	09/26/90	Great Britain			
	A56	0 501 904 A2	02/26/92	EPO			
	A57	0 233 789	02/20/87	EPO			
	A58	0 084 621 A2	11/23/82	EPO			

EXAMINER INITIAL		OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
	A59	Article published in Science News, February 2, 1974, Vol. 105, No. 5, p. 105.
	A60	Article published in Science, July 1981.
	A61	Abrams, Dr. Susan B., "Implanted photodiodes could restore lost vision", Biophotonics Research, 2 pages, 1997
	A62	Ando, Haruhisa, et al. "Design Consideration and Performance of a New MOS Imaging Device", 6 pages, IEEE (1985)
	A63	Armington, J.C., Brigell, M., "Effects of Stimulus Location and Pattern Upon the Visually Evoked Cortical Potential and the Electroretinogram," <i>Int J. Neurosci</i> , 1981; 14:169-178.
	A64	Baylor, D.A., Fourtes, M.G.F., "Electrical Responses of Single Cones in the Retina of the Turtle," <i>J Physiol</i> , 1970; 207:77-92.
	A65	Bergmann-Schaefer, "Lehrbuch der Experimentalphysik" (Textbook of Experimental Physics), vol. II, "Electricity and Magnetism" by Prof. DrIng. H. Gobrecht, 3 pp., (1971) plus translation.

EXAMINER	DATE CONSIDERED	

Page 3 of 5

FORM PTO-1449	SERIAL NO.		CASE NO.
PORIVI P 10-1449		To be Assigned	3614/94
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE		GROUP ART UNIT
APPLICANT'S INFORMATION DISCLOSURE		Herewith	3762
STATEMENT			
(use several sheets if necessary)	APPLICANT(S	S): Vincent Chow 6	et al.

EXAMINER		OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
INITIAL	A66	Bobsch, M.D., Joseph M. and Grosser, Ph.D., Morton "Newer Repair at the AXOM Level: A
'	A00	Morger of Microsurgery and Microelectronics." VCH Publishers, Inc. (1907).
	A67	Boettner, E.A., Wolter, J.R., "Transmission of the Ocular Media," <i>Invest Ophthalmol</i> , 1962;
	, , ,	1.776 783
	A68	Brady, G.S., Clauser, H.R., Materials Handbook, Thirteenth Edition, New York, McGraw-Hill,
		1001: 730 740
	A69	Brindley, G.S., "The Site of Electrical Excitation of the Human Eye," J. Physiol, 1955; 127-189-
		200
	A70	Brindley, G.S., "Beats Produced by Simultaneous Stimulation of the Human Eye with
		Intermittent Light and Intermittent or Alternating Electric Current," J. Physiol, 1962; 164:156-167.
	A71	Brown, et al., "Monolithically Integrated 1 x 12 Array of Planar InGaAs/InP Photodiodes,"
	^' '	Journal of Lightwaye Technology, Vol. LT-4, No. 3, March 1986, pgs. 283-286.
	A72	Chanin D.M. et al. "A New Silicon p-n Junction Photocell for Converting Solar Radiation Into
	7.2	Flectrical Power" Letters to the Editor, Journal of Applied Physics, Vol. 25, (JanDec., 1954).
	A73	Chow A V "Electrical Stimulation of the Rabbit Retina with Subretinal Electrodes and right
		Density Microphotodiode Array Implants," ARVO Abstracts, Invest Ophthalmol Vis Sci. 199334
	1	(Suppl):835
	A74	Curcio, C.A., Sloan, K.R., Kaliha, R.E., Hendrickson, A.E., "Human Photoreceptor
		Topography," J of Comparative Neurology, 1990; 292:497-523.
	A75	Dawson, W.W., Radtke, N.D., "The Electrical Stimulation of the Retina by Indwelling
		electrodes," Invest Ophthalmol Vis Sci., 1997; 16:249-252.
	A76	Dowling, J.E., Ripps, H., Visual Adaptation in the Retina of the Skate," <i>J Gen Physiol</i> , 1970; 56:491-520.
	A77	Eagle, R.C., Lucier, A.C., Bernardino, V.B., et al., "Retinal Pigment Epithelial Abnormalities in
		Fundus Flavimaculatus " Ontthalmol 1980: 87:1189-1200.
	A78	Encyclopedia of Electronics, 2d Ed., Stan Gibilisco and Neil Sclater, Co-Editors-in-Chief, pp.
		640-645 (1990).
	A79	Fenwick, P.B.C., Stone, S.A., Bushman, J., Enderby, D., "Changes in the Pattern Reversal
		Visual Evoked Potential as a Function of Inspired Nitrous Oxide Concentration,"
	1.00	Electroencephalogr Clin Neurophysiol, 1984; 57178-183.  John B. Flynn, et al. "Total Active Area Silicon Photodiode Array", 3 pages (1964).
	A80	Graeme, J., "Position-Sensing Photodiode Amplifiers," Ch. 10, 12 pages
	A81	Graeme, J., "Position-Sensing Photodiode Amplifiers, Cri. 10, 12 pages  Granit, R., Helme, T., "Changes in Retinal Excitability Due to Polarization and Some
	A82	Observatios on the Relation Between the Processes in Retina and Nerve," J. Neurophysiol,
		1939; 2:556-565.
	A83	Hagins, W.A., Penn, R.D., Yoshikami, S., "Dark Current and Photocurrent in Retinal Rods,"
	'	Piophys 1 1970: 10:380-412
	A84	Hergert, Karl, "Detectors: Expanded Photodetector Choices Pose Challenges for Designers",
		The Photonics Design and Applications Handbook (1996).

EXAMINER	DATE CONSIDERED

Page 4 of 5

FORM PTO-1449	SERIAL NO.	To be Assigned	CASE NO. 3614/94
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EXAMINER INITIAL		OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
INTIAL	A85	Humayun, M.S., Propst, R.H., Hickinbotham, D., deJuan E., Jr., Dagnelle G., Visual Sensations Produced by Electrical Stimulation of the Retinal Surface in Patients with Ed-Stage Retinities Pigmentosa (RP)," ARVO Abstracts, <i>Invest Ophthalmol Vis. Sci.</i> , 1993; 34
	A86	Humayun, M., Propst R., De Juan, E., et al., "Bipolar Surface Electrical Stimulation of the Vertebrate Petina," Arch Ophthalmol. 1994: 112:110-116.
	A87	Kataoka, "An Attempt Towards an Artificial Retina: 3-D IC Technology for an Intelligent Image Sensor," <i>Transducers '85: International Conference on Solid-State Sensors and Actuators</i>
	A88	Knighton, R.W., "An Electrically Evoked Slow Potential of the Frog's Retina. I. Properties of
	A89	Lin, Heng-Chih, et al., "The Vertical Integration of Crystalline NMOS and Amorphous Orientational Edge Detector" IEEE Briefs, 3 pages, (1992).
	A90	Melen, et al., "A Transparent Electrode CCD Image Sensor for a Reading Aid for the Blind,
	A91	Narayanan, M.V., Rizzo, J.F., Edell, D., et al., "Development of a Silicon Retinal Implant: Cortical Evoked Potentials Following Focal Stimulation of the Rabbit Retina with Light and Floctricity," ARVO Abstracts. Invest Opthalmol Vis Sci., 1994; 35(Suppl): 1380.
	A92	Pages P A "Petinitis Pigmentosa" Surv Ophthalmol., 1988; 33:137-177.
	A93	Paton, D., Goldberg, M.F., Management of Ocular Injuries, Philadelphia, W.B. Saunders Co.,
	A94	The Penguin Dictionary of Electronics, Editor: Valerie Illingworth, Carol Young Market House
-	A95	Potts, A.M., Inoue J., Buffum D., "The Electrically Evoked Response of the Visual System (EER)." Invest Ophthalmol Vis Sci., 1968; 7:269-278.
	A96	Robblee, Lois S., Electrochemical Guidelines for Selection of Protocols and Electrode  Materials for Neural Stimulation, ch. 2. Renner Learning Resource Center (undated).
	A97	Rovamo, J., Virsu, A., "An Estimation and Application of the Human Cortical Magnification Factor." Fxp. Brain Res. 1979: 37:495-510.
	A98	Rubin M.L. Ontics for Clinicians, Gainsville, TRIAD Scientific Publishers, 1974; 119-123.
	A99	Shannon, R.V., "A Model of Safe Levels for Electrical Stimulation," IEEE Tarms Biomed Eng., 1992; 39:424-426.
	A100	Smith J. "Creating a Bionic Eye", ABC News, 11/5/98, 3 pp.
	A101	Stone, J.L., Barlow, W.E., Humayun, M.S., deJuan, E., Jr., Milam, A.H., "Morphometric Analysis of Macular Photoreceptor and Ganglion Cells in Retinas with Retinitis Pigmentosa,"
	A102	Sze, S.M., "Physics of Semiconductor Devices", 2" Ed., A Wiley-Interscience Publication, John Miley & Sens (undated)
	A103	Tasman, E., ed. Duane's Foundations of Clinical Ophthamology, Volume 3, Philadelphia,
	A104	Terr, L.I., Linthicum, F.H., House, W.F., "Histopathologic Study of the Cochlear Nuclei After 10 Years of Electrical Stimulation of the Human Cochlea," <i>Am J Otol.</i> , 1988; 9:1-7.

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FORM PTO-1449	SERIAL NO.	To be Assigned	CASE NO. 3614/94
			GROUP ART UNIT
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE		
APPLICANT'S INFORMATION DISCLOSURE		Herewith	3762
STATEMENT			
(use several sheets if necessary)	APPLICANT(S)	: Vincent Chow e	et al.

EXAMINER INITIAL		OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
	A105	Tomita, T., "Electrical Activity of Vertebrate Photoreceptor," Q Rev. Biophys., 1970; 3:179-222.
	A106	Zrenner, Dr. Eberhart, The Development of Subretinal Microphotodiodes for Replacement of Degenerated Photoreceptors, <i>Ophthalmic Res.</i> pp. 269-280 (1997).

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